

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P299588

Luminaire Tested: **GLNA-AF-03-LED-E1-SL2-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299588
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-03-LED-E1-SL2-7030-HSS
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13225.1 lumens
Efficiency: N/A
Efficacy: 79.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

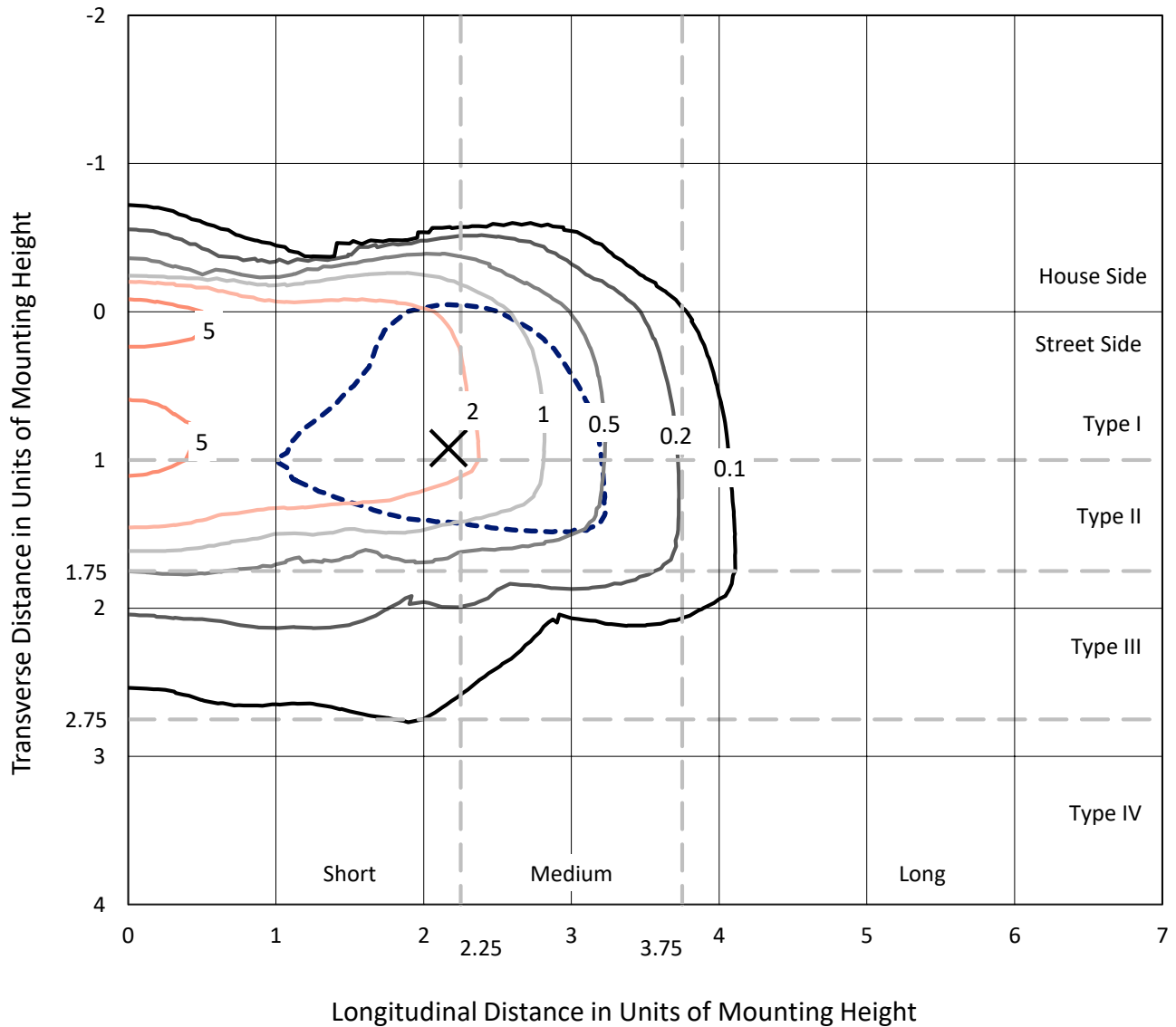
Input Watts (W): 166
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P299588
 CATALOG NUMBER: GLNA-AF-03-LED-E1-SL2-7030-HSS

Iso-Footcandle Lines of Horizontal Illumination

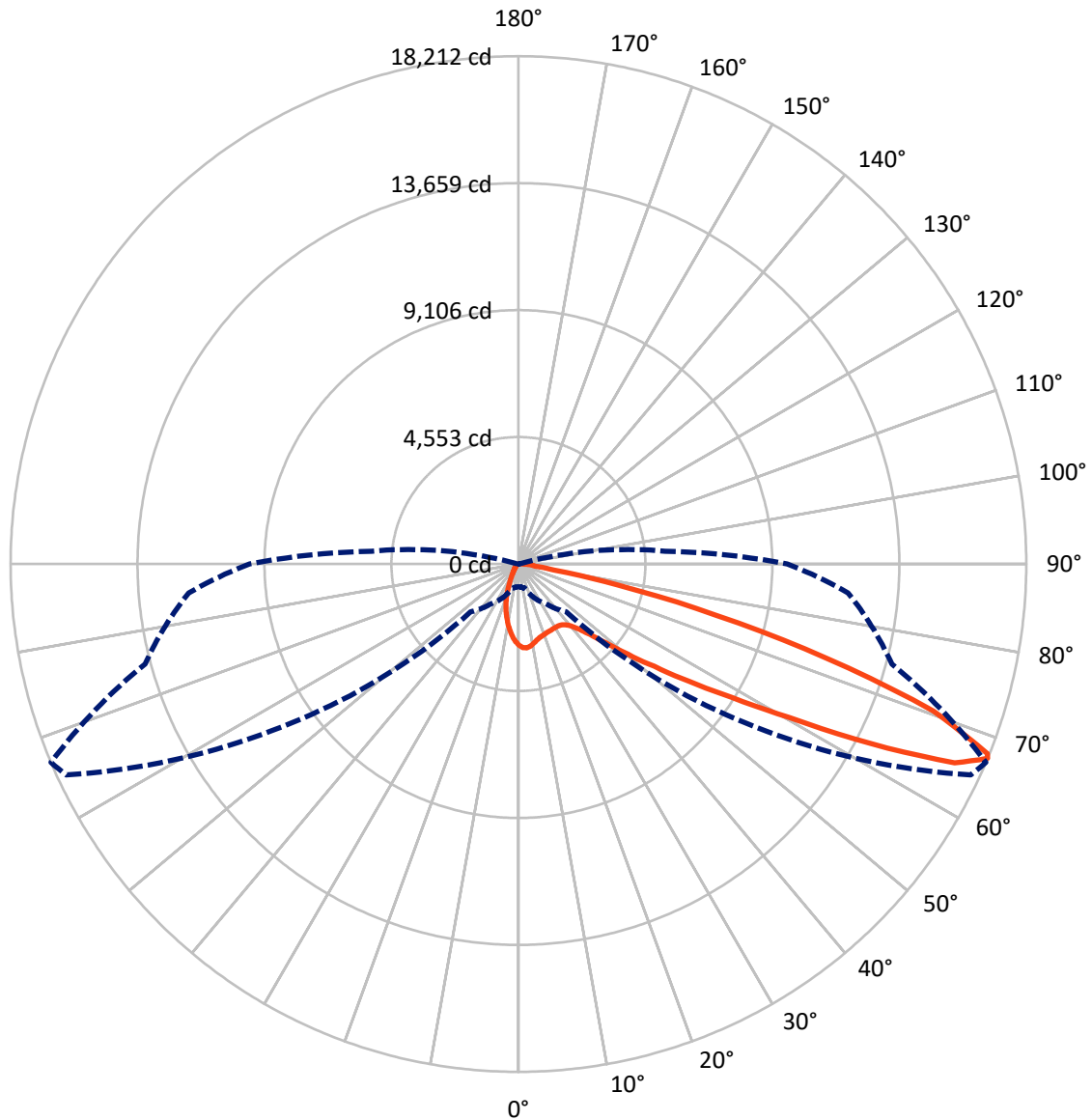
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7.3 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P299588
CATALOG NUMBER: GLNA-AF-03-LED-E1-SL2-7030-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

REPORT NUMBER: P299588

CATALOG NUMBER: GLNA-AF-03-LED-E1-SL2-7030-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1373.2	0.0	1373.2
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	11852.0	0.0	11852.0
	% Fixture	89.6	0.0	89.6
Total	Lumens	13225.1	0.0	13225.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	237.3	1.8
10°-20°	505.1	3.8
20°-30°	734.4	5.6
30°-40°	1145.7	8.7
40°-50°	2029.5	15.3
50°-60°	3211.5	24.3
60°-70°	3678.3	27.8
70°-80°	1525.7	11.5
80°-90°	157.6	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	13225.1	100.0
0°-180°	13225.1	100.0

Coefficient of Utilization



REPORT NUMBER: P299588

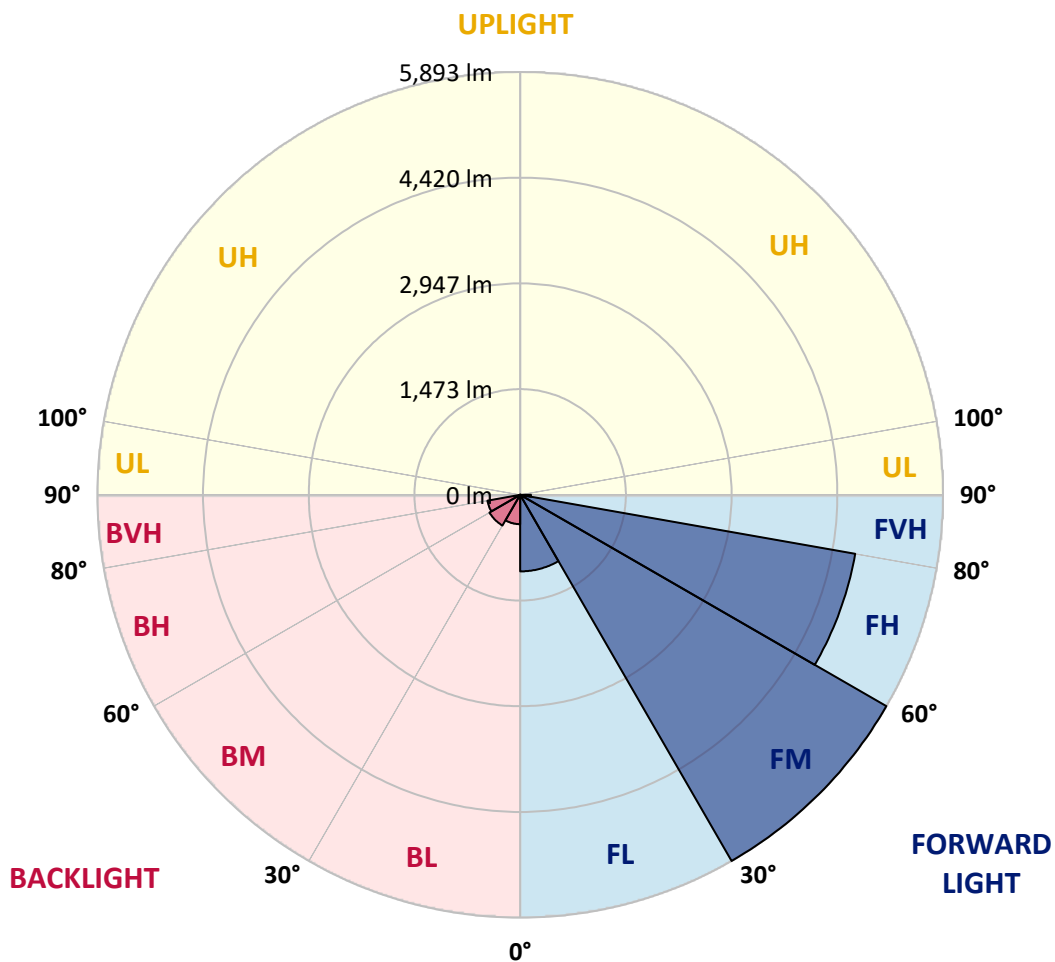
CATALOG NUMBER: GLNA-AF-03-LED-E1-SL2-7030-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1067.1	8.1			
FM (30°-60°)	5893.2	44.6			
FH (60°-80°)	4741.2	35.9			G2/5000
FVH (80°-90°)	150.5	1.1			G2/225
BL (0°-30°)	409.8	3.1	B1/500		
BM (30°-60°)	493.5	3.7	B1/1000		
BH (60°-80°)	462.8	3.5	B1/500		G1/500
BVH (80°-90°)	7.1	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short





REPORT NUMBER: P299588

CATALOG NUMBER: GLNA-AF-03-LED-E1-SL2-7030-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	2916.6	2916.6	2916.6	2916.6	2916.6	2916.6	2916.6	2916.6	2916.6	2916.6	2916.6
2.5°	3015.4	3021.5	3020.8	3025.4	3036.2	3037.0	3026.2	3005.3	3000.7	2973.7	2926.7
5°	2780.9	2798.6	2809.4	2853.4	2902.7	2962.1	3006.9	3023.1	3020.8	3001.5	2930.5
7.5°	2513.2	2530.9	2543.3	2595.0	2660.5	2762.4	2878.8	2974.5	2983.0	3003.8	2927.4
10°	2335.0	2338.1	2355.1	2404.4	2473.1	2577.2	2716.1	2883.5	2908.9	2985.3	2919.7
12.5°	2188.4	2190.8	2213.1	2266.4	2339.6	2444.5	2590.3	2784.0	2823.3	2962.1	2918.2
15°	2084.3	2092.8	2112.8	2168.4	2246.3	2350.4	2500.1	2710.7	2757.7	2953.7	2932.1
17.5°	2049.6	2058.8	2065.0	2105.1	2176.1	2277.9	2431.4	2662.8	2716.1	2958.3	2959.1
20°	2085.8	2092.8	2078.9	2088.9	2132.9	2223.9	2373.6	2622.0	2685.2	2963.7	2993.8
22.5°	2220.8	2223.9	2186.1	2142.2	2134.4	2184.6	2328.1	2589.6	2657.4	2978.3	3034.7
25°	2452.3	2446.9	2385.1	2290.3	2200.8	2177.6	2301.1	2569.5	2643.6	2993.8	3077.1
27.5°	2731.5	2739.2	2654.4	2516.3	2345.8	2223.9	2297.2	2561.0	2637.4	3004.6	3114.1
30°	3070.9	3081.7	2984.5	2811.0	2566.4	2338.1	2332.7	2559.5	2633.5	2997.6	3117.2
32.5°	3417.3	3430.4	3354.0	3175.1	2861.1	2529.4	2412.9	2576.4	2641.2	2973.7	3099.5
35°	3779.8	3798.3	3747.4	3593.9	3260.7	2805.6	2554.1	2628.1	2677.5	2971.4	3081.7
37.5°	4280.5	4297.4	4201.8	4039.0	3744.3	3175.8	2780.9	2725.3	2763.1	3008.4	3086.3
40°	5027.9	5025.6	4778.8	4529.6	4275.8	3646.4	3099.5	2901.2	2920.5	3120.3	3143.4
42.5°	5842.5	5838.7	5473.8	5095.0	4865.9	4225.7	3518.3	3205.1	3192.0	3326.2	3291.5
45°	6470.4	6469.7	6171.9	5745.3	5576.4	4890.6	4059.8	3627.9	3607.8	3661.0	3564.6
47.5°	6738.1	6742.7	6593.1	6293.0	6364.0	5790.1	4742.5	4240.3	4210.3	4188.7	4042.1
50°	6529.8	6539.1	6551.4	6492.8	6941.8	6998.8	5658.2	5103.5	5088.9	4992.4	4763.3
52.5°	5849.5	5896.5	6041.5	6227.4	7142.3	8159.0	7093.7	6175.8	6097.1	5994.5	5742.2
55°	4703.2	4754.9	5030.2	5481.5	6843.8	8921.2	9105.5	7558.1	7427.0	7120.7	6756.6
57.5°	3112.6	3192.8	3592.4	4166.3	5976.7	9043.8	11112.7	9476.6	9019.9	8181.4	7771.0
60°	1714.8	1791.9	2225.5	2745.4	4316.7	8437.5	12462.6	11974.3	11167.4	9367.0	9002.9
62.5°	1056.0	1097.7	1417.8	1901.5	2588.8	6659.4	12741.9	15113.1	14179.0	10893.6	10490.9
65°	840.8	858.6	1015.2	1554.4	1856.0	3961.1	11840.1	17506.0	17194.3	12741.9	11823.1
67°	816.1	823.1	897.1	1334.5	1749.5	2428.3	9919.3	17895.5	18211.8	13860.4	11864.8
67.5°	821.5	829.2	899.4	1273.6	1746.4	2231.6	9257.5	17742.0	18141.6	13949.1	11680.4
70°	792.2	816.1	1029.8	1272.8	1660.8	1854.4	5544.0	15372.3	15788.1	12960.9	9910.8
72.5°	280.8	282.3	445.1	1029.8	1805.8	1874.5	2784.0	11269.3	11577.1	9914.7	7145.4
75°	166.6	141.9	148.1	293.1	1725.6	1820.5	1606.0	7200.9	7315.9	5681.3	3618.6
77.5°	114.9	100.3	103.4	129.6	657.2	1795.0	1275.9	3755.1	3632.5	1992.5	770.6
80°	65.6	57.9	61.7	113.4	239.1	1674.7	1203.4	1522.7	1298.3	337.9	212.9
82.5°	34.7	29.3	35.5	93.3	166.6	1043.7	1205.7	735.9	583.2	114.2	145.0
85°	12.3	10.0	17.0	64.0	111.1	320.1	1117.7	618.7	486.0	55.5	110.3
87.5°	2.3	2.3	6.9	26.2	44.7	98.0	661.1	367.2	246.1	33.2	75.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P299588

CATALOG NUMBER: GLNA-AF-03-LED-E1-SL2-7030-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2916.6	2916.6	2916.6	2916.6	2916.6	2916.6	2916.6	2916.6	2916.6	2916.6	2916.6
2.5°	2907.4	2874.2	2829.5	2774.7	2709.9	2652.8	2610.4	2566.4	2557.2	2541.7	2539.4
5°	2888.1	2831.0	2719.9	2592.6	2456.9	2334.2	2234.7	2146.0	2106.7	2072.7	2068.9
7.5°	2859.6	2773.9	2584.9	2379.7	2167.6	1974.8	1811.2	1695.5	1589.1	1538.2	1530.4
10°	2826.4	2703.7	2433.0	2148.3	1855.2	1582.9	1339.9	1136.3	1012.8	939.6	930.3
12.5°	2795.5	2635.1	2277.9	1908.4	1518.9	1154.8	842.4	648.0	518.4	465.9	459.7
15°	2780.9	2579.5	2132.9	1663.1	1167.1	735.1	460.5	356.4	314.0	301.6	300.8
17.5°	2779.3	2532.5	1991.0	1409.3	817.7	427.4	300.1	273.8	265.4	262.3	262.3
20°	2778.6	2487.7	1849.0	1146.3	519.1	284.6	249.9	243.8	237.6	233.7	233.7
22.5°	2787.0	2447.6	1700.9	877.8	327.1	230.6	219.8	213.7	206.0	200.6	199.8
25°	2795.5	2416.8	1549.7	624.8	236.8	200.6	189.8	181.3	170.5	163.5	162.8
27.5°	2797.1	2378.2	1387.7	418.1	198.2	175.1	161.2	148.1	135.8	128.8	128.1
30°	2773.9	2313.4	1208.0	282.3	175.1	152.0	133.5	119.6	108.0	102.6	102.6
32.5°	2728.4	2233.2	1010.5	212.9	155.8	130.4	110.3	97.2	89.5	87.2	86.4
35°	2687.5	2146.8	807.6	180.5	139.6	110.3	90.3	81.8	77.1	76.4	75.6
37.5°	2663.6	2077.4	617.1	163.5	124.2	92.6	76.4	70.2	67.9	66.3	67.1
40°	2682.1	2019.5	455.9	149.7	108.8	77.1	64.8	61.7	59.4	58.6	58.6
42.5°	2763.1	2009.5	338.6	137.3	94.1	64.0	56.3	54.0	52.5	51.7	52.5
45°	2976.0	2071.2	263.0	125.7	79.5	54.0	47.8	47.1	46.3	46.3	46.3
47.5°	3296.2	2198.5	219.1	112.6	66.3	46.3	41.7	40.9	40.1	40.9	40.9
50°	3838.4	2431.4	195.9	99.5	54.8	39.3	35.5	35.5	35.5	35.5	36.3
52.5°	4663.1	2889.6	180.5	86.4	44.7	33.2	30.1	30.1	30.9	30.9	31.6
55°	5581.8	3497.5	166.6	73.3	37.8	27.8	24.7	25.5	26.2	27.0	27.0
57.5°	6578.4	4170.9	155.0	60.2	32.4	22.4	20.8	21.6	22.4	23.9	23.9
60°	7781.0	4899.9	138.1	47.1	27.0	17.7	16.2	17.7	20.1	21.6	22.4
62.5°	9101.7	5604.9	116.5	37.0	22.4	13.9	13.1	16.2	19.3	20.8	21.6
65°	10004.2	5826.3	89.5	30.1	17.0	10.0	10.8	14.7	18.5	20.8	20.8
67°	9638.5	5282.5	73.3	25.5	13.9	7.7	10.0	14.7	18.5	20.1	20.8
67.5°	9384.8	5069.6	70.2	24.7	13.1	7.7	10.0	14.7	18.5	20.8	20.8
70°	7636.0	3808.4	58.6	18.5	10.8	6.9	8.5	13.9	17.7	20.1	20.1
72.5°	5305.6	2348.1	52.5	13.1	9.3	6.2	7.7	13.1	17.0	19.3	20.1
75°	2522.5	850.1	44.7	10.0	8.5	5.4	6.9	13.1	17.0	19.3	19.3
77.5°	514.5	197.5	36.3	8.5	6.9	5.4	6.2	12.3	16.2	18.5	18.5
80°	168.9	76.4	27.0	7.7	6.9	5.4	6.2	11.6	16.2	17.7	18.5
82.5°	121.9	38.6	17.7	7.7	6.9	5.4	5.4	11.6	15.4	17.7	17.7
85°	93.3	27.0	11.6	7.7	6.9	5.4	5.4	10.8	14.7	17.0	17.0
87.5°	61.7	10.8	9.3	7.7	6.9	5.4	5.4	10.8	13.9	16.2	17.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)